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THEY WENT TO COLLEGE--A DESCRIPTIVE SUMMARY OF THE CLASS OF 1965.

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THE RESULTS OF A QUESTIONNAIRE SURVEY OF FRESHMEN AT A NATIONAL SAMPLE OF ACCREDITED FOUR-YEAR COLLEGES AND UNIVERSITIES IN THE FALL OF 1961, ARE REPORTED. TO COMPENSATE FOR THE POSSIBLE EFFECTS OF BIAS IN THE SAMPLE, THE DATA PRESENTED WAS DIFFERENTIALLY WEIGHTED TO REPRESENT THE DEFINED POPULATION OF THE CLASS OF 1965. INFORMATION ABOUT THE BACKGROUNDS, PERSONAL CHARACTERISTICS, EDUCATIONAL AND VOCATIONAL ACHIEVEMENTS, ACTIVITIES, AND CURRENT PLANS OF THE STUDENTS IS PROVIDED IN BOTH WRITTEN AND TABULAR FORM. ALTHOUGH THE PRIMARY PURPOSE OF THE PAPER WAS TO MAKE DESCRIPTIVE DATA AVAILABLE, CERTAIN IMPLICATIONS OF THE DATA ARE ALSO DISCUSSED. THE AUTHORS NOTE THAT SUMMARY TABULATIONS OF DATA, SUCH AS ARE PRESENTED IN THE REPORT, SHOULD BE REGARDED AS PURELY DESCRIPTIVE AND AS POSSIBLE SOURCES FOR HYPOTHESES TO BE TESTED. THIS IS ACE RESEARCH REPORT, VOLUME 2, NUMBER 5, 1967. (SK)

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They Went To College: A Descriptive Summary of the Class of 1965*

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American Council on Education

* Portions of this paper were presented at the Association of Institutional Research Annual Forum, Athens, Georgia, May 9, 1967.

They Went to College: A Descriptive Summary of the Class of 1965

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In the summer of 1965, the Office of Research of the American Council on Education followed up randomly selected samples of students from each of 246 colleges and universities included in a survey--conducted in the fall of 1961 at the National Merit Scholarship Corporation--of all entering freshmen students at a national sample of colleges and universities.[1] These students would presumably, if they had proceeded through college at the normal rate (as many of them do not, of course), have just graduated in the summer of 1965. The sample of 246 institutions was originally selected to be representative of the total population of regionally accredited four-year colleges and universities as of 1961 (Irwin, 1960). But because a simple random sample of colleges and universities would be made up mostly of very small and relatively less affluent institutions, the larger and wealthier institutions were deliberately over-represented

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[1]The initial survey was supported in part by Grant G-13704 from the National Science Foundation to the National Merit Scholarship Corporation. The follow-up study was supported in part by Grant GS-22 to the American Council on Education from the National Science Foundation (the U.S. Office of Education and the National Institutes of Health also contributed to the support of this latter project under a transfer of funds agreement).

in order to insure heterogeneity within the sample (Astin, 1965(a), pp. 102-105).

Questionnaires were mailed to a random sample of 60,078 of the 127,212 students included in the original survey--or approximately 250 students per institution. For institutions enrolling fewer than 300 freshmen in 1961, all students were included; random samples of 250 students were selected from the larger institutions. The arbitrary figure of 250 was chosen with the expectation that we would obtain about a 50 percent rate of return from the initial mailing. Following a reminder postcard, 30,506 questionnaires were returned to the Council's Office of Research. A second, shorter form of the questionnaire was mailed to the 29,572 nonrespondents, and an additional 5,899 forms were returned. The final number of usable completed questionnaires was 36,405--slightly more than 60 percent of the 60,078 students who were initially sent the follow-up questionnaire. However, since the U.S. Post Office could not forward the questionnaire to many of the students who had moved (the student's name and home address was obtained in 1961), we estimate that at least 75 percent of the students who actually received the mailed questionnaires eventually returned them.

The follow-up questionnaire inquired about several aspects of the student's progress: educational and vocational achievements, current activities, the college experience, current plans, and information about background not obtained in the 1961 survey. The purpose of this paper is to present descriptive information about the Class of 1965, including data on the student's personal background and subsequent performance. Although such descriptive data do not establish causal relationships among the variables represented, we believe they are useful in placing the current vague and highly subjective notions about the outcomes of college into

an objective, empirical frame of reference. Thus, this paper focuses on the descriptive or categorical rather than the inferential or theoretical aspects of the college experience.

Weighting the Data

A series of analyses were performed to determine the extent and possible effects of the bias in the sample of respondents. Although response biases did not appear to have any appreciable effect on cross-product relationships (that is, relative monotonic orderings among items), their obvious distorting effect on marginal tabulations makes it necessary to adjust the data in order to estimate population parameters. Thus we computed a set of individual weights to adjust for differences between respondents and nonrespondents in the sample of 60,078 students to whom the questionnaires were sent, and also a set of institutional weights to adjust for the disproportionate sampling of institutions from the various stratification cells of the original sampling design (see Astin, 1965(a), pp. 102-105). The purpose of these weights was to adjust the data to be representative of the population of students entering accredited four-year colleges in 1961.

A multiple stepwise regression analysis was utilized to ascertain the degree of bias among respondents. This analysis was carried out by randomly selecting a sample of 4,000 students from the original mailing of 60,078 and defining for each student a dichotomous dependent variable (respondent or nonrespondent) arbitrarily scored "0" or "1". A pool of 98 precollege input items served as the independent variables in the analysis. The independent variables included sex, 12 high-level secondary school achievements (e.g., elected class president, placed [first, second, or third] in a school science contest), size of high school graduating class, over-all high school grade average, level of educational aspiration,

probable major field, initial career choice, father's education, and father's occupation. The .05 level was used as a cut-off for the stepwise procedure; in other words, the final regression solution included those predictor variables whose independent contribution to the reduction of the residual sums of squares at each step was statistically significant at the .05 level of confidence.

The biasing variables in the sample of respondents were; the level of educational aspiration (less than a bachelor's degree vs. bachelor's or higher degree), high school grade average, level of father's education, and whether or not the student had ever had an original work published while attending high school. These variables defined a 7 x 4 x 2 x 2 four-way table into which the 36,405 respondents were sorted and individual weights for each of the 112 cells were computed. However, in order to obtain stable weights within all the cells of the tabulation, it was necessary to collapse two of the categories: level of aspiration and publication or nonpublication of original work. The individual weights for the remaining 28 cells are shown in Table 1.

The weights in Table 1 clearly show that high school grade average is monotonically related to response bias. Although father's educational level is also obviously related to the probability that a person will return a questionnaire, the relationship is not monotonic. The slight reversals in the first two rows of Table 1 (at the lower levels of the category of father's education) indicate that students whose fathers are high school dropouts are less likely than are other students, including those whose fathers have only a grammar school education, to return a questionnaire. The pattern of weights shown in Table 1 otherwise conform to logical, a priori expectations that the least able students from relatively less educated families are not as likely to return a mailed questionnaire.

Table 1

Individual Weights Used to Adjust for Response Bias and Number of Students in Each Cell That Returned a Questionnaire[1]

Father's Educational Level	Student's High School Grade Average						
	D	C	C+	B-	B	B+	A-, A, A+
Grammar school or less	(9) 1.73	(207) 1.51	(277) 1.34	(319) 1.14	(598) 1.09	(530) 0.94	(704) 0.87
Some high school	(11) 2.47	(281) 1.52	(458) 1.30	(498) 1.15	(889) 1.08	(749) 0.97	(986) 0.86
High school graduate or some college	(37) 1.86	(819) 1.42	(1401) 1.22	(1706) 1.10	(3006) 1.03	(2581) 0.93	(3492) 0.84
College graduate or higher	(39) 1.31	(576) 1.24	(986) 1.07	(1298) 1.01	(2262) 0.93	(2313) 0.88	(3474) 0.81

[1] Numbers in parentheses indicate sample size. Total N = 30,506; Males = 17,150, Females = 13,356. Total weighted N = 622,413; Males = 356,634, Females = 265,779.

These results indicate that it is essential to obtain some estimate of response bias in mail surveys and to adjust the data among the returns. A major obstacle to correctly interpreting and generalizing from the results of any mail survey is failure to take into account the degree of bias among respondents (Panos and Rice, 1967).

The marginal tabulations presented in this report are the result of applying the product of an individual's weight and his institutional weight to his data vector. Thus--to the extent possible given our sample and pool of items--the data presented here reflect the results that would have been obtained if (a) everyone had responded to our mailed questionnaires (100 percent response rate), and (b) our sample of institutions was a simple stratified random sample drawn from the defined population of regionally accredited four-year colleges and universities. The weighted

descriptive data presented in this paper are based on the responses from 30,506 students who returned the initial long form of our questionnaire. The total weighted N was 622,413. Since everyone did not respond to every item in the questionnaire, the N varies slightly from item to item.

Background Information

Fifty-six percent of the students in the population were men; 44 percent were women. Slightly more than one-third of the Class of 1965 were married at the time of the follow-up survey. Of these, 5 percent had been married before starting college, over 58 percent while in college, and 36.3 percent after leaving college. In addition, 38.5 percent of this group had one or more children. A summary of marital status by sex is shown in Table 2. The data in the table support the notion that marriage

Table 2

Marital Status of the Class of 1965

Item Description	Weighted N		Percentages	
	Male	Female	Male	Female
Have you ever been married?	355804	264168		
No			70.5	58.9
Yes: Now living with spouse			29.0	40.0
Separated			0.2	0.4
Divorced			0.3	0.6
Widowed			0.0	0.1
When were you married?	103167	106278		
Before entering college			6.2	4.1
While in college: in 1961			2.2	2.1
in 1962			5.5	7.4
in 1963			14.4	15.8
in 1964			24.4	19.4
in 1965			18.0	8.0
After leaving college			29.4	43.1
How many children do you have?	107875	111498		
None			60.7	62.2
One			30.4	27.7
Two			6.7	8.5
Three or more			2.2	1.6

is a more likely outcome of going to college for women than for men.

The students were asked to estimate their parents' current annual income and to indicate both parents' educational level (see Table 3). Only 7.3 percent of the Class of 1965 reported that their parents' incomes were less than $4,000; more than twice as many students said that their parents' incomes were over $19,000. The modal (21.4 percent) interval reported was $7,000-$9,999. Almost half the students' fathers had received at least some college training, and 42 percent of the mothers had

Table 3

Parental Income and Parents' Educational Level

Item Description	Weighted N Male	Weighted N Female	Percentages Male	Percentages Female
Estimated Current Annual Parental Income	347316	251039		
Less than $4,000			7.6	6.8
$4,000--$6,999			20.1	18.2
$7,000--$9,999			22.7	19.5
$10,000--$12,999			18.8	19.2
$13,000--$15,999			11.1	11.9
$16,000--$18,999			5.7	6.1
$19,000--$21,999			3.5	3.9
$22,000--$24,999			2.2	3.0
$25,000 or more			8.3	11.3
Father's Education	353373	262515		
Grammar school			14.8	12.1
Some high school			15.4	13.2
High school graduate			25.8	23.0
Some college			18.2	20.5
College degree			14.5	16.4
Post graduate degree			11.3	14.8
Mother's Education	353762	263205		
Grammar school			9.1	6.1
Some high school			12.9	11.2
High school graduate			38.9	36.8
Some college			19.5	22.6
College degree			15.8	18.3
Post graduate degree			3.8	5.0

continued their formal education beyond the high school level. These data are shown in Table 3.

Data on race and religious background are summarized in Table 4. Slightly more than 96 percent of the students reported their racial background as Caucasian. Almost 3 percent indicated that they were Negro, 0.1 percent American Indian, 0.4 percent Oriental, and 0.3 percent "other." The data on racial background show that in relation to the proportion of Negroes in the population (about 12 percent) the American Negro is underrepresented among the college-trained, particularly the Negro male: twice as many Negro girls as boys were members of the Class of 1965.

Table 4

Racial and Religious Background

Item Description	Weighted N Male	Weighted N Female	Percentages Male	Percentages Female
Racial Background	355264	264570		
Caucasian			97.4	95.4
Negro			1.8	3.8
American Indian			0.1	0.1
Oriental			0.5	0.3
Other			0.2	0.3
Religious Background	352318	263769		
Protestant			66.2	68.2
Roman Catholic			21.9	21.6
Jewish			6.7	5.3
Other			3.2	2.9
None			2.0	2.0
Present Religious Preference	343142	258546		
Protestant			53.4	59.3
Roman Catholic			19.8	21.6
Jewish			6.0	4.7
Other			5.1	4.7
None			15.7	9.7

Over two-thirds of the students indicated that they came from Protestant family backgrounds, and 21.8 percent reported Roman Catholic backgrounds. Although only 2 percent checked "none" for their family religious background, 13.1 percent said that they themselves have no religious preference at present. These data suggest a trend among college students to reject the parents' religious beliefs, a tendency more pronounced among boys than among girls; a similar trend has been observed in other recent studies (Nichols and Astin, 1965; Astin, Panos, and Creager, 1966; Panos and Astin, 1967a). These data support the notion that one outcome of college, at least for some students, is a rejection of organized religion.

College Finances

Who pays for college expenses? How much money do college students earn from their summer jobs? How much money does the Class of 1965 expect to be earning after their class has graduated? Items intended to shed some light on these questions were included in our follow-up questionnaire.

Data concerned with the financing of undergraduate college and living expenses are shown in Table 5. More than 75 percent of the Class of 1965 indicated that 9 of the 12 items listed in Table 5 were not a source of financial aid during their undergraduate years. As would be expected, parents are far and away the largest single source of financial aid to the college student. Over 93 percent of the Class of 1965 reported that financial "support from their parents" helped pay for some part of their college and living expenses. The only other source of undergraduate financial support that a majority of students reported was their own earnings; over 87 percent of the students helped pay their own way. It would appear that the luxury of going to college--for the Class of 1965--was a financial burden borne largely by the parents and the students.

Table 5

The Financing of Undergraduate College and Living Expenses
(Percentages)

Item	Males						Females					
	None	1-20%	21-40%	41-60%	61-80%	81-100%	None	1-20%	21-40%	41-60%	61-80%	81-100%
Support from parents	8.3	20.5	12.4	16.6	18.4	23.8	4.1	12.4	8.3	11.7	16.6	46.9
Support from spouse	87.3	7.0	2.6	1.8	0.9	0.5	81.8	8.8	3.1	2.3	1.4	2.6
Scholarship or fellowship:												
from college	70.0	18.3	5.5	3.2	1.4	1.7	67.2	21.2	6.3	3.5	1.2	0.6
state or local government	87.5	8.1	2.1	1.3	0.7	0.3	86.1	8.1	2.5	1.7	1.1	0.7
Federal Government	94.5	2.1	1.2	1.1	0.6	0.5	93.9	2.5	1.2	0.8	0.5	1.0
Own earnings	6.5	39.9	21.2	15.1	8.3	9.1	21.8	52.0	12.7	7.0	3.0	3.4
Loans:												
Federal Government	78.8	12.8	5.0	2.5	0.8	0.2	76.0	12.2	5.4	4.0	1.8	0.6
state or local government	94.8	3.0	1.0	0.7	0.3	0.2	96.1	2.0	0.8	0.6	0.3	0.2
from college	93.7	5.3	0.7	0.2	0.0	0.0	94.3	4.6	0.6	0.3	0.1	0.2
commercial	92.5	5.0	1.3	0.4	0.4	0.3	96.1	2.4	0.6	0.4	0.3	0.2
other	93.4	4.0	1.2	0.8	0.3	0.2	94.0	3.6	1.1	0.5	0.4	0.4
Other souces	61.8	29.1	3.8	2.2	1.3	1.8	67.0	23.7	3.6	1.9	1.7	2.1

Table 6

Earnings through Summer Employment for the Class of 1965

Item	Weighted N	None	$1-$99	$100-$199	$200-$299	$300-$499	$500-$599	$600-$699	$700-$999	$1000 or more
Summer 1962:										
Males	347188	9.4	2.8	4.4	7.0	14.8	12.7	12.9	18.0	18.0
Females	253354	28.8	7.8	8.8	11.8	16.8	10.8	7.8	5.4	2.0
Summer 1963:										
Males	340556	11.2	2.9	3.5	5.7	11.8	11.4	11.3	18.8	23.3
Females	246501	29.8	6.9	8.0	10.4	16.1	10.3	8.4	7.3	2.9
Summer 1964:										
Males	336657	11.5	2.8	4.3	5.7	11.0	9.3	9.8	16.0	29.7
Females	239890	35.0	7.1	6.8	7.7	13.7	8.4	7.9	8.7	4.7
Summer 1965:										
Males	327726	13.4	2.7	3.7	5.2	9.2	7.7	8.0	15.6	34.5
Females	231314	41.8	6.4	5.0	6.1	10.5	6.7	6.3	9.3	8.0

Slightly more than 11 percent of the Class of 1965 earned $1,000 or more during the summer of 1962, at the end of their freshman year; more than twice as many reported earnings of $1,000 or more during the summer of 1965. Over one-third of the students earned more than $600 in the summer of 1962, and 43.8 percent had earnings of at least $600 during the summer of 1965. The summer earnings of the Class of 1965 are given in Table 6. As would be expected, the boys earn substantially more money than the girls; over half the boys earned $700 or more in 1965, whereas only 17.3 percent of the girls earned at least that much. However, the popular view that this earning power differential is attributable to discrimination against women in the employment arena should be tempered by the recognition that girls have a much easier financial go of it while in college than do the boys (see Table 5). Furthermore, parents with limited resources may be less likely to send their daughters to college. The notion that women who go to college come from relatively more affluent homes is supported by the data in Table 3, which show that more boys than girls come from the lower end of the socioeconomic scale. Thus, women may have less need for remunerative employment than do men.

The modal interval (34.4 percent) reported by the Class of 1965 as their anticipated 1966 average monthly incomes (before deductions) was $250-$499. As many as 5.1 percent expected to earn a monthly salary of $1,000 or more from their own work, and more than twice as many expected to be earning at least $1,000 a month from their total family income (not parental family) during 1966. These data are displayed in Table 7.

Table 7

Estimated Average Monthly Income (Before Deductions) for 1966

Income	Weighted N:	Income from own work: Males (339065)	Income from own work: Females (239900)	Total Family Income: Males (187503)	Total Family Income: Females (164785)
None		14.6	18.0	11.9	8.8
Under $100		18.3	8.9	10.2	3.8
$100--$249		18.5	10.3	15.8	6.7
$250--$499		24.4	48.4	25.9	31.7
$500--$749		16.2	9.1	19.5	23.6
$750--$999		1.9	0.6	7.6	12.0
$1000--$1249		1.2	0.4	3.1	5.1
$1250--$1499		0.9	0.5	0.8	1.3
$1500 or more		4.0	3.8	5.1	6.9

Undergraduate Employment Status

Students were asked also about the nature of the jobs they held both during the academic year and during the summer. Ten percent of the Class of 1965 were employed during the 1961-1962 academic year; of these, one-fifth reported that their jobs were career-related. During the 1965-1966 academic year (the time of the follow-up), three-fourths of the employed members of the Class of 1965 were doing career-related work. During the summer of 1962, over 60 percent of the students were employed. Of these, almost 20 percent reported that their jobs were career-related; however, during the summer of 1965, almost one-half of those employed were working in career-related jobs. These data, shown in Table 8, indicate a trend over the college years toward vocationally oriented employment among the working members of the Class of 1965. The possible effects that the

student's employment pattern during the college years has on his final career choice seems an area worth investigating.

Table 8

Career Related Employment Status During the College Years

Item Description	Males Weighted N	Males Career Related Job	Males Noncareer Job	Females Weighted N	Females Career Related Job	Females Noncareer Job
Academic year 1961-62	39095	21.0	79.0	24000	19.3	80.7
Summer 1962	262855	18.2	81.8	146779	19.6	80.4
Academic year 1962-63	76487	27.3	72.7	47471	31.3	68.7
Summer 1963	258307	24.8	75.2	144193	26.8	73.2
Academic year 1963-64	90939	35.3	64.7	60984	38.2	61.8
Summer 1964	252990	33.1	66.9	132490	36.8	63.2
Academic year 1964-65	94742	45.7	54.3	70225	53.7	46.3
Summer 1965	242651	46.4	53.6	117606	50.6	49.4
Academic year 1965-66	107809	68.3	31.7	116508	81.2	18.8

Student Housing

Although 64 percent of the students lived in a college dormitory during their freshman year at college, only 24.5 percent were living in dormitories during the academic year 1964-65. As would be expected, the decrease over the college years in the percentage of students living in college housing is monotonic and apparently linear. The only other category of housing which shows a similar (but positive) monotonic trend over the years is the percentage of students living off campus in private apart-

ments. Somewhat surprisingly, the percentage of students living at home with their parents increases immediately after the freshman year, but subsequently decreases. As Table 9 indicates, women are more likely to live in a college dormitory throughout the college years than are men. The preceding observation lends support to the popular belief that in loco parentis--as applied by college officials--perpetuates our society's double standard with regard to differential treatment of the sexes.

The data shown in Table 9 show that although more than twice as many boys as girls live off campus in a private apartment during the freshman year, more boys than girls live at home with their parents over the college years. Because the rules and regulations regarding student housing are one part of the college environment that can be manipulated fairly easily by college and university officials, it would seem advisable that institutional researchers attempt to discover how these various housing arrangements affect the development of the student.

Follow-up Outcomes

The preceding sections of this report have discussed some personal and background characterisitcs of the Class of 1965. The following sections present descriptive data concerned with the students' activities and college experiences, their educational and vocational achievements, their attitudes toward college, and their plans for the future.

Because the data presented in this paper are based on student self-reports, the question naturally arises, to what extent do the results reflect inaccurate or deliberately distorted self-descriptions?

Our starting point is the assumption that the subject is willing to co-operate: that is, to be sincere and honest. The descriptive information presented here is based chiefly on responses to questions of fact

Table 9

Living Accommodations During the Academic Years 1961-1965

Item Description	Weighted N:	Males 1961-62 (351568)	Males 1962-63 (352082)	Males 1963-64 (351453)	Males 1964-65 (350233)	Females 1961-62 (263617)	Females 1962-63 (263383)	Females 1963-64 (261059)	Females 1964-65 (259456)
With parents		24.4	26.5	24.7	20.9	20.3	23.1	21.4	18.6
Private apartment		7.6	16.0	23.8	33.5	2.8	7.8	14.3	23.0
College dormitory		57.3	36.2	26.0	19.4	72.9	54.1	41.8	31.4
Fraternity (Sorority) house		7.1	14.5	14.2	10.9	0.8	7.9	9.7	8.4
Other student housing		2.1	2.4	3.1	4.1	2.1	2.9	3.3	3.3
Other		1.5	4.5	8.1	11.1	1.2	4.2	9.5	15.3

rather than questions calling for opinion. Furthermore, the information requested is presumably known by the student and could, in theory, be objectively verified by an independent observer. Therefore, it is reasonable to suppose that an individual might deliberately give inaccurate information only if the question arouses conflict and defense. The nature of the items reported here, however, does not appear to be such as to invite faking--the items are not "content threatening." Thus, it seems safe to infer that the results presented here represent, for the most part, a reliable descriptive summary of the Class of 1965.

Persistence in College

How many get a terminal degree within the four years following their matriculation? How many students drop out of or transfer from college during the undergraduate years? These and related questions are explored in this section.

As can be seen from Table 10, we estimate that 65 percent of the students in the population had completed four or more years of college at the time of the survey. Thus, over one-third of the Class of 1965 did not complete four academic years of college work within the four years following matriculation. Slightly less than 60 percent of the students had achieved a terminal degree; almost half the boys, though only 34.3 percent of the girls, held no degree at the time of the study. More than 44 percent of the students in the population had changed their college or dropped out of college since their matriculation in 1961.

Of the students who changed institutions or dropped out of college for any period of time since 1961, 16 percent reported that they were asked to leave their first college because of unsatisfactory academic work, over 80 percent indicated that they left voluntarily, and three percent admitted that they were forced to leave for disciplinary reasons. Almost

two-thirds of the students who left their college of matriculation said that they would have left even if they had had greater financial resources at their disposal; slightly more than 63 percent of these students attended

Table 10

Years of College Completed, Highest Degree Held, and Persistence in College

Item Description	Weighted N Males	Weighted N Females	Percentages Males	Percentages Females
Years of college completed:	356634	265779		
less than one term			1.9	2.3
less than one year			1.9	2.3
one year			5.5	7.0
two years			9.3	9.3
three years			16.7	13.7
four or more years			64.7	65.4
Highest degree held:	344409	259786		
none			46.5	34.3
associate			3.4	2.5
bachelor's			49.3	61.7
master's			0.5	0.2
other			0.2	1.4
Changed college or dropped out of college for any period of time since entering college of matriculation in 1961:	354994	264040		
Yes			44.0	44.6
No			56.0	55.4
Student left first college:	162519	120748		
because of unsatisfactory academic work			21.6	8.5
because of disciplinary reasons			3.7	2.5
voluntarily			74.7	89.0
Would have left first college even if I had greater financial resources:	130110	109419		
Yes			57.9	66.0
No			26.9	20.0
Not sure			15.2	14.0
Attended any other colleges since 1961:	163751	123236		
Yes, (3 or more)			2.2	2.2
Yes, (2 other)			12.5	13.4
Yes, (one other)			47.4	48.9
No			37.8	35.5

at least one other college since 1961. These data suggest that increased financial aid may not be the panacea, as some have suggested, for solving the problem of college student attrition.

Table 11 shows the importance assigned by the dropouts to each of several possible reasons for leaving college. The fact that almost one-half of the students who left their first college indicated that they were

Table 11

Reasons Given for Leaving College of Matriculation in 1961[1]

	Males			Females		
Item Description	Weighted N	Major Reason	Minor Reason	Weighted N	Major Reason	Minor Reason
Changed career plans	113129	22.1	15.4	97397	20.7	13.6
Dissatisfied with college environment	114740	26.7	22.3	98366	27.0	19.7
Scholarship terminated	108070	2.8	3.1	93109	1.4	2.5
Wanted time to reconsider interests and goals	113791	26.4	22.4	95979	17.7	16.2
Marriage	108406	7.8	3.1	99319	29.0	6.1
Pregnancy	103942	1.1	0.6	93940	8.2	1.4
Tired of being a student	110522	11.3	16.3	94715	6.0	14.0
Could not afford cost	112639	23.6	15.6	97536	17.8	12.7
Academic record unsatisfactory	112942	15.5	20.8	95147	5.8	11.1
Drafted	107081	1.4	0.9	91881	0.0	0.1

[1] A third choice, "unrelated to my decision," is not shown.

dissatisfied with the environment suggests that, although great amounts of time and effort are expended annually by counselors, students, and parents in deciding on the "right" college, much more needs to be learned about the complex decision process involved in selecting a college. Over 40 percent reported that they dropped out of college because they had changed their career plans or wanted time to reconsider their interests and vocational goals. Almost 30 percent of the girls said that marriage was a major reason for their decision to leave college, whereas only 7.8 percent of the boys reported marriage as a major factor in this decision.

The factors shown in Table 11 are, to be sure, the student's ex post facto explanations about why he dropped out of college, but they provide clues as to the types of items that should be included as input or control variables in longitudinal institutional studies of college student attrition. For example, items about the entering student's marital plans, his anxieties about college finances, and his degree of confidence in his expressed interests and career plans should be included in attrition studies in order to provide a frame of reference in which the later behavior of the dropout can be viewed.

The College: Academic Year 1964-1965

In this section, we present some of the typical activities and achievements of those members of the Class of 1965 who were enrolled as students during the academic year 1964-65. Table 12 shows the students' membership status in a number of formal college organizations. Over 21 percent of the students were members of a national or local social fraternity or sorority, and 25.4 percent were members of an honorary (subject matter) fraternity. Eleven percent were members of a college choir, glee club, or marching band, and 42 percent participated in extracurricular activities as members of college or intramural athletic teams.

Table 12

Membership Status in College Organizations[1]

Item Description	Males			Females		
	Weighted N	Active Member	Inactive Member	Weighted N	Active Member	Inactive Member
National social fraternity or sorority	297848	28.0	7.2	194609	21.8	6.6
Local social fraternity or sorority	248282	8.6	1.7	189055	7.9	2.1
Intramural athletic team	295841	40.8	4.0	189143	11.2	2.0
College athletic team	288254	12.4	0.9	187340	3.1	0.7
Choir or glee club	284945	5.8	0.7	188934	11.4	1.1
Marching band	283929	2.4	0.2	186888	1.3	0.4
Honorary (subject matter) fraternity	289430	20.4	4.0	191921	22.4	4.6

[1] A third alternative, "not a member," is not shown.

Students were also asked about their experiences during the academic year 1964-65. More than one-third of the Class of 1965 reported that they fell in love during this period, and 19.8 percent said that they got married. As many as 12 percent indicated they changed their major field of study in 1964-65. Almost 13 percent of the Class of 1965--more than twice as many boys as girls--reported that they had flunked a course in their senior year. One-fourth of the members of the Class of 1965 were elected to a student office, over 14 percent wrote an article for their school paper or magazine, 8 percent played on a varsity athletic team, and 2.7 percent had a lead in a college play. The data concerning senior year experiences of the Class of 1965 are shown in Table 13.

Table 13

Senior Year Experiences of the Class of 1965

Item Description	Males		Females	
	Weighted N	(% Yes)	Weighted N	(% Yes)
Elected to a student office	295116	22.8	195497	29.1
Played on a varsity athletic team	294322	11.6	191143	2.5
Changed your long-term career plans	294718	28.2	193704	26.4
Flunked a course	292599	16.4	191294	6.6
Changed your major field	291622	13.9	190896	9.2
Fell in love	294458	34.0	194993	43.2
Got married	293369	18.5	193391	21.9
Had a lead in a college play	290471	2.4	190705	3.1
Wrote an article for the school paper or magazine	292747	14.7	191930	14.0

The day-to-day activities during the senior year, as reported by the Class of 1965, are shown in Table 14.[2] The activities engaged in by 95 percent or more of both sexes were; asking questions in class, going to the movies, checking out a book or journal from the college library, discussing sex with friends, and studying in the library. Table 14 gives the complete list of 36 interpersonal and noninterpersonal behaviors and the frequency with which members of the Class of 1965 reported engaging in them.

[2]These items have been used in earlier research (Astin, 1967) as measures of the peer environments of colleges and universities.

Table 14

Senior Year Activities of the Class of 1965[1]

Item Description	Males			Females		
	Weighted N	Percent Reporting Occasionally	Frequently	Weighted N	Percent Reporting Occasionally	Frequently
Stayed up all night	307699	54.9	6.3	204284	50.8	6.5
Came late to class	307496	62.3	5.1	203724	62.0	5.2
Prayed (not including grace before meals)	306929	42.4	29.2	204186	35.1	49.7
Listened to New Orlean's (Dixieland) Jazz	306761	52.8	5.1	203994	50.6	5.1
Gambled with cards or dice	306434	35.4	4.8	203791	11.2	0.7
Lost privileges for infraction of college rules	307039	2.9	0.2	203982	7.9	0.2
Played a musical instrument	306744	19.1	12.4	203645	34.4	16.9
Took a nap or rest during the day	175070	57.3	32.5	133102	55.3	38.2
Drove a car	306742	27.0	67.8	203917	33.7	52.2
Discussed sex with friends	307227	62.5	33.9	204329	65.5	30.6
Drank beer	307302	44.1	39.1	204198	42.5	22.2
Voted in a student election	307419	39.7	45.6	204110	34.8	52.5
Studied in the library	307482	48.2	45.1	204165	44.5	50.4
Attended a ballet performance	306474	12.5	1.1	203485	23.4	3.5
Overslept and missed a class or appointment	307489	47.0	4.3	204459	37.9	2.7
Had a blind date	307392	39.0	2.4	203996	38.2	2.6
Drank in a bar or club	307156	53.4	26.7	204017	50.9	18.8
Attended church	306728	38.9	37.4	203515	34.3	51.8
Participated in informal group singing	306995	46.6	13.1	204256	49.9	28.5
Cheated on examinations	307164	15.0	0.2	204116	9.3	0.2
Became intoxicated	307264	49.7	5.0	204266	31.0	1.5
Drank wine	307582	42.8	3.2	204273	50.3	5.7
Went to the movies	306388	65.5	31.2	203977	62.1	35.0
Discussed how to make money with other students	307312	64.6	24.5	203867	61.6	13.6
Listened to folk music	306853	60.8	20.4	203934	57.1	37.0
Attended a public recital or concert	307089	53.4	14.4	204182	58.5	25.0
Made wisecracks in class	306461	41.4	3.2	203985	29.6	2.5
Arranged a date for another student	307249	50.9	6.4	203832	51.8	7.9
Went to an overnight or weekend party	307539	33.5	4.4	203958	28.5	4.2

Table 14
(Continued)

Senior Year Activities of the Class of 1965[1]

Item Description	Males			Females		
	Weighted N	Percent Reporting Occasionally	Frequently	Weighted N	Percent Reporting Occasionally	Frequently
Took weight-reducing or dietary formula	307326	8.8	1.3	204090	21.2	6.1
Argued with other students	306391	71.8	16.5	203488	72.1	9.6
Been interviewed as a client in the college counseling center	306353	18.5	3.2	203483	16.3	2.2
Called a teacher by his first name	306959	29.9	6.6	203889	20.4	4.9
Checked out a book or journal from the college library	307408	41.3	54.4	204173	22.5	75.3
Tried on clothes in a store without buying anything	307458	45.0	3.6	204015	68.3	19.9
Asked questions in class	307439	48.9	49.6	204269	51.3	45.7

1
A third alternative, "not at all," is not shown.

The College Image

The students who attended college during 1964-65 were asked to rate their institution with respect to their over-all satisfaction with it and their satisfaction with a number of specific aspects. These data are shown in Table 15. Not surprisingly, the majority of students (83.7 percent) were satisfied with their college; slightly more than 10 percent said they were "on the fence," and only about 6 percent indicated that they were dissatisfied with their college.

As Table 15 shows, 6 percent of the students felt that there was too much social life on the campus, and 22.1 percent that there was not enough. Although 36.6 percent reported that they had not received enough advice and guidance from college faculty and staff, almost 80 percent said they had had just about the right amount of freedom in course selection. Three-fourths of the students said that the amount of work required in their courses was just about right; over 11 percent felt that the work-load was not enough, and 13 percent that it was too much. Almost 40 percent of the Class of 1965 said that they did not have enough personal contact with faculty during the 1964-65 academic year, and 40.6 percent that there were not enough outlets for creative activities.

Table 16 shows the students' ratings of the college "image" and of its psychological "climate" or atmosphere. Over 50 percent of the students felt that there was a great deal of pressure to get high grades, that most of their fellow students were of a high calibre academically, that there was keen competition among students for high grades, and that being in the college built poise and maturity. The pressure to get high grades was felt more by boys (54.7 percent) than by the girls (48.6 percent). Over one-third of the students said that they felt "lost" when they first came to the campus, and almost as many (30.8 percent) felt that most stu-

Table 15

Impressions of the Undergraduate College

Item Description	Males[1] Weighted N	Males[1] Too Much or Too Many	Males[1] Just About the Right Amount	Females[1] Weighted N	Females[1] Too Much or Too Many	Females[1] Just About the Right Amount
Freedom in course selection	304780	3.6	81.1	202356	2.4	77.2
Social life	304629	7.1	71.1	202016	4.2	73.2
Personal contacts with classmates	304571	2.4	81.7	202471	2.3	80.6
Work required of you in courses	304618	11.7	75.4	202307	14.8	75.3
Outlets for creative activities	303847	1.8	58.0	201979	1.6	57.1
Sleep	304647	3.9	62.7	202399	1.9	54.7
Exercise	304601	1.2	48.5	202267	1.1	46.0
Personal contacts with faculty	304872	0.7	58.6	202329	1.5	60.5
Personal contacts with family	304502	4.8	73.4	202102	3.7	78.1
Advice and guidance from faculty and staff	304860	1.0	60.9	202571	1.8	64.0

	Weighted N	Males	Weighted N	Females
What is your over-all evaluation of this college?	305118		202759	
Very satisfied		40.0		41.3
Satisfied		43.8		42.2
On the fence		10.1		10.7
Dissatisfied		4.8		4.5
Very dissatisfied		1.2		1.3

[1] A third alternative, "not enough," is not shown.

Table 16

The College Image

Item Description	Males: Weighted N	Males: Very Descriptive	Males: In Between	Females: Weighted N	Females: Very Descriptive	Females: In Between
To what extent does each of the following describe this college?[1]						
Intellectual	302102	16.5	66.7	201448	21.4	64.9
Snobbish	302220	5.7	31.1	201053	5.0	34.7
Social	301423	36.6	52.6	200994	35.9	52.8
Victorian	298404	6.1	26.6	200612	5.9	25.2
Practical-minded	301457	34.8	57.3	199996	31.9	59.6
Warm	301826	36.5	51.9	201325	48.6	43.0
Realistic	300842	39.7	53.3	200912	38.5	54.5
Liberal	301373	32.0	53.3	201087	34.2	51.8

Item Description	Males: Weighted N	Males: Percent Saying Yes	Females: Weighted N	Females: Percent Saying Yes
The students are under a great deal of pressure to get high grades	305116	54.7	202488	48.6
The student body is apathetic and has little "school spirit"	305546	50.1	203325	43.9
Most of the students are of a very high calibre academically	304397	50.2	202381	52.7
There is keen competition among most of the students for high grades	304779	61.0	202309	53.8
Freshmen have to take orders from upperclassmen for a period of time	305360	21.3	202231	27.7
There isn't much to do except go to class and study	304663	21.7	201973	21.0
I felt "lost" when I first came to the campus	304393	33.5	202302	33.2
Being in this college builds poise and maturity	303260	74.6	200652	75.3
Athletics are overemphasized	304695	15.2	201813	13.2
The classes are usually run in a very informal manner	303964	62.5	201759	62.6
Most students are like "numbers in a book"	303957	33.0	202134	27.6

[1] A third alternative, "not at all descriptive," is not shown.

dents on the campus were like "numbers in a book." Over two-thirds of the students said that the labels "social," "practical," "warm," "realistic," and "liberal" were very descriptive of their college. Only 18.5 percent thought that "intellectual" was very descriptive of the college atmosphere, and 15.5 percent said that it was not at all applicable.

The students who were in college during the academic year 1964-65 were asked to describe a course (taken during the year) that was most closely related to their primary field of interest. The students' descriptions are shown in Table 17. Over one-fourth of these courses had 14 or less students in the class, 55.7 percent had less than 25 students in the class, and 32.4 percent had 30 or more class members. Almost half the teachers held the academic rank of professor, and about one-third were assistant or associate professors. Although 18.4 percent of the instructors were women, only 5.6 percent of the male members of the Class of 1965 had a female instructor in the course which they described in this section of the questionnaire.

Educational Achievements and Aspirations

Data on college grades are shown in Table 18. The modal (35.6 percent) over-all college grade average as reported by the Class of 1965 was B- or C+. Over 12 percent had a B+ or better over-all grade average, and 21.7 percent had a C grade average. The modal (34 percent) grade average in the major field of study was B. Less than 10 percent--and twice as many boys as girls--had a C over-all grade average in their major field of study.

In 1961, 57.6 percent of the Class of 1965 said that a bachelor's degree was the highest level degree that they planned to obtain. In 1965, only 23.2 percent reported the bachelor's degree as the highest academic degree they desired; 70 percent said they hoped to achieve a postgraduate degree, and 25.6 percent of these students hoped to go on to the doctoral

Table 17

The Classroom Environment

Item Description	Weighted N	Males (% Yes)	Weighted N	Females (% Yes)
The class met only at a regularly scheduled time and place	304204	91.9	201672	86.6
The instructor had a good sense of humor	304155	89.2	201189	87.6
The instructor was often sarcastic in class	303386	27.4	201158	28.7
Students were permitted to smoke in class	303834	34.1	201189	28.2
The class was taught by a graduate student	303652	4.0	200818	3.6
The lectures followed the textbook closely	302676	38.1	199665	25.0
The instructor was a woman	303880	5.6	200927	37.8
The instructor called students by their first name	303965	42.4	201181	54.7
The instructor encouraged a lot of class discussion	303725	75.1	200935	79.5
The instructor was exceptionally well-grounded in the course subject matter	304255	91.0	201361	89.5
The instructor outlined the day's lecture or discussion at the beginning of each class	303763	38.3	200968	40.5
I sometimes argued openly with the instructor	304138	33.8	200884	29.1
I took notes regularly in class	303845	79.2	200940	77.3
I usually typed my written assignments	301766	34.2	199861	55.1
I was in the instructor's office one or more times	304022	78.0	201067	74.3
I was a guest in the instructor's home one or more times	304077	12.5	201210	17.9
The instructor was enthusiastic	303970	86.0	201362	88.3
Students had assigned seating	303796	25.5	200535	19.4
Attendance was usually taken every day	303663	52.9	200979	59.2
The instructor spoke in a monotone	302939	15.0	200439	12.7
The instructor was often dull	302520	20.2	200418	20.5
The instructor knew me by name	302275	89.5	200172	92.5
The instructor was engaged in research of some kind	300419	60.1	198588	58.7
We sometimes had unannounced or "pop" quizzes	303826	27.7	200712	23.0
The examinations were usually of the "objective" type (multiple choice, matching, etc.)rather than the "essay" type	299209	28.9	198286	27.1
I almost never spoke in class unless I was called on	303089	29.6	200768	28.9

Table 17
(continued)

The Classroom Environment

Item Description	Weighted N	Males (% Yes)	Weighted N	Females (% Yes)
If he had wanted, a student could probably have passed this course mainly on "bluff"	303224	12.5	200837	13.4
I sometimes argued openly with other students in the class	302954	36.3	200518	33.4
I knew the instructor's first name	302414	82.3	199878	83.3
I knew which institution awarded the instructor his degree	303405	64.3	200816	62.1
I usually did all of the assigned reading in this course	302800	81.1	200612	83.1

Table 18

Over-all College and Major Field Grade Average

Grade Average	Males		Females	
Weighted N:	Overall (352331)	Major Subject (334456)	Overall (260668)	Major Subject (244522)
3.74-4.00 (A or A+)	1.4	7.1	2.3	9.9
3.25-3.74 (A- or B+)	8.1	20.2	14.3	29.7
2.75-3.24 (B)	19.6	33.5	29.8	34.7
2.25-2.74 (B- or C+)	36.9	24.6	33.8	17.5
1.75-2.24 (C)	26.3	12.2	15.4	6.7
1.25-1.74 (C- or D+)	6.6	1.9	3.7	1.1
Less than 1.25 (D or less)	1.1	0.5	0.7	0.5

level. The current level of educational aspiration of the Class of 1965 is shown in Table 19.

Despite the fact that 32.2 percent of the students acknowledged that they were not sure when they would obtain their highest degree, the

Table 19

Level of Educational Aspriation

Item Description	Weighted N	Males	Weighted N	Females
Highest degree planned:	333015		238190	
None		2.2		5.8
Associate (or equivalent) (A.A., A.S., etc.)		2.6		3.0
Bachelor's degree (A.B., B.A., B.S., etc.)		21.7		25.3
Master's degree (M.A., M.S., etc.)		37.8		54.7
Ph.D. or Ed.D.		18.0		8.1
M.D., D.D.S., or D.V.M.		6.4		0.7
LL.B. or J.D.		8.4		0.5
B.D.		0.9		0.1
Other		2.0		1.8
When expect to obtain highest degree?	352976		258660	
I have		5.2		12.3
This year (1965)		1.9		1.9
1966		11.6		9.3
1967		10.9		8.9
1968		14.4		8.5
1969		14.9		7.3
Later than 1969		16.6		9.1
Not sure		24.6		42.7

data shown in Table 19 suggest that the Class of 1965 has somewhat unrealistic aspirations. A similar trend was reported in a recent study by Davis (1964); he found that more than three-fourths of a large sample of graduating college seniors expressed an interest in pursuing postgraduate training. If these data do imply such a trend in higher education, it would seem that the articulation between undergraduate and graduate institutions be even more carefully planned and evaluated than has been urged recently.

Discussion

The most readily available source of information about higher educational institutions is the student. Students are, in some respects, a

captive audience: they have become accustomed to being asked to fill out a variety of questionniares, forms, tests, inventories, booklets, and the like. The considerable interest that researchers and administrators have in student data (probably regarded by the students themselves as unnecessarily redundant) is easily understood. After all, most instructional processes are designed to produce changes in the student's intellectual and character development. Only by learning something about the student, and about how he changes during college, can the people responsible for structuring particular learning experiences discover what their programs in fact accomplish. Information about the student is, in short, the core of any institutional research program.

Meaningful information about the student is vital because it extends the fund of knowledge necessary for rendering rational decisions. Administrative decision-making involves a choice among desired educational objectives and among the alternative means available for achieving these objectives. Therefore, it is important that the information consulted by the decision maker be relevant to the educational goals which he considers desirable.

But the quality of available information can vary greatly. Furthermore, empirical data that are purely descriptive do not explore causal relationships among the variables represented and it is the causal relationships that the administrator must know if he is to suit means to ends (Panos and Astin, 1967b). Although tabulations of descriptive data may imply certain trends, they provide no way of ascertaining the particular causal factors that account for the trends. For this reason, summary tabulations of data such as are presented in this report are useful if they are regarded as purely descriptive and as a possible source for ideas and hypotheses that can later be tested.

Summary

The purpose of this report was to make available a summary report of some of the results of a questionnaire survey, conducted in the summer of 1965, of 30,506 young adults who were enrolled as freshmen at a national sample of accredited four-year colleges and universities in the fall of 1961. The data presented were differentially weighted so as to represent the defined population of the Class of 1965. This report gave information concerning the backgrounds, personal characteristics, educational and vocational achievements, activities, and current plans of the Class of 1965. Certain implications of the data were discussed, but our primary purpose was to make these descriptive data available. It is our hope that with the current emphasis on institutional research, these data will be useful in suggesting ideas and hypotheses that can be tested in the context of such research.

References

Astin, Alexander W. Who Goes Where to College? Chicago: Science Research Associates, 1965(a).

Astin, Alexander W. The College Environment, Washington, D.C.: American Council on Education, 1967. (mimeo)

Astin, Alexander W., Panos, Robert J., and Creager, John A. "National norms for entering college freshmen--fall 1966," ACE Research Reports, Vol. 2, No. 1, American Council on Education, 1967.

Davis, James A. Great Aspirations. Chicago: Aldine Publishing Co., 1964.

Irwin, Mary. American Universities and Colleges. 8th ed. Washington, D.C.: American Council on Education, 1960.

Nichols, Robert C., and Astin, Alexander W. "Progress of the merit scholar: An eight-year follow-up," National Merit Scholarship Corporation Technical Report, Vol. 1, No. 5, 1965.

Panos, Robert J., and Astin, Alexander W. "A profile of entering 1965 college freshmen," College and University, Vol. 42, Winter, 1967(a).

Panos, Robert J. and Astin, Alexander W. "The utilization of information in the educational decision-making process," Educational Record, American Council on Education, 1967(b). (in press).

Panos, Robert J. and Rice, Janet E. "An experimental analysis of different mail follow-up techniques within a national sample of hard core non-respondents," to appear in Proceedings, American Psychological Association, 1967.

Other recent publications by staff of the Office of Research:

Astin, A. W. "Research Findings on the Academic Administration Internship Program," Educational Record, 1966, Vol. 47, No. 2, 173-184.

_____. "Trends in the Characteristics of Entering College Students, 1961-1965." Proceedings of the Sixth Annual Forum of the Association for Institutional Research, 99-104. (Also appeared in ACE Research Reports, Vol. I, No. 4.)

_____. and Lee, C. B. T. "Current Practices in the Evaluation and Training of College Teachers," Educational Record, 1966, Vol. 47, No. 3, 361-375.

_____. and Panos, R. J. "A National Research Data Bank for Higher Education," Educational Record, 1966, Vol. 47, No. 1, 5-17.

_____, _____, and Creager, J. A. "A Program of Longitudinal Research on the Higher Educational System," ACE Research Reports, Vol. I, No. 1.

_____, _____, and _____. "National Norms for Entering College Freshmen - Fall 1966," ACE Research Reports, Vol. II, No. 1.

Creager, J. A. "Evaluation and Selection in the 1966-67 Academic Administration Internship Program," ACE Research Reports, Vol. I, No. 3.

_____, "The Use of Publication Citations in Educational Research," The Journal of Educational Measurement, 1967, in press. (Also appeared in ACE Research Reports, Vol. II, No. 2.)

Panos, R. J. "Some Characteristics of Junior College Students," ACE Research Reports, Vol. I, No. 2.

_____, and Astin, A. W. "A Profile of Entering 1965 College Freshmen," College and University, 1967, Vol. 42, Winter.

_____, and _____. "On Using Systematic Information in Making Educational Decisions," Educational Record, 1967, Vol. 48, No. 2, in press.